

# **PROTECTING TOMALES BAY BY MANAGING VESSEL USAGE: RESPONSE TO PUBLIC COMMENTS**

## **Overview of the Process to Date**

The Gulf of the Farallones National Marine Sanctuary (GFNMS) of the National Oceanic and Atmospheric Administration (NOAA) and the California State Lands Commission (CSLC), are co-leaders of a multi-agency effort to identify ways to improve ecosystem protection in Tomales Bay by assessing vessel use and storage. An Interagency Committee (IC) comprised of eleven local, state and federal agencies with jurisdiction over boating, parks, waters, submerged lands, and shore areas of Tomales Bay jointly developed a document for public input, *Protecting Tomales Bay by Managing Vessel Usage*.

The document was released for public comment on August 31, 2007. There was a three-month public comment period that closed on December 3, 2007. During that time, three public workshops were held and public comment was received at workshops and in writing to the GFNMS.

### ***Sanctuary Advisory Council Working Group: An Interactive Scoping Opportunity***

The GFNMS is committed to continuing to engage boaters and the local community in providing input on the development of a draft a vessel management plan for Tomales Bay. To that end, the GFNMS Sanctuary Advisory Council (SAC) has initiated a Working Group for Tomales Bay Vessel Management. The Working Group consists of representatives of boating associations, shellfish growers, commercial fishermen, boat services operations, conservation organizations, shore-side property owners, and state and federal agencies with jurisdiction in Tomales Bay.

The Working Group's recommendations on the development of a vessel management plan will be forwarded to the GFNMS SAC for discussion, and upon deliberation, the SAC will provide its recommendations to the GFNMS Superintendent who will bring the recommendations to the IC to consider in developing a draft Vessel Management Plan.

For more information about Working Group activities and meetings, please visit the following website:

<http://farallones.noaa.gov/ecosystemprotection/tomalesbay.html>

## **About The Response to Public Comments**

This is the response to public comments from the following IC agencies: GFNMS, CLSC, National Parks Service/Point Reyes National Seashore (PRNS), California State Parks, California Department of Fish and Game, California Department of Boating and Waterways, California Coastal Commission, and California Department of Public Health (CDPH). This response to public comments does not include all the agencies that may have jurisdiction or management authority over the submerged lands or waters of Tomales Bay or the Tomales Bay watershed. This response to public comments is intended to enhance collaboration and coordination among agencies, and serves as one step in a comprehensive model for an interactive scoping program and public input process.

## **About The Public Comment Process**

The IC received 22 written comments in the form of letters or emails. Comments were also received at the 3 workshops hosted by the IC. There were 78 participants in the workshops. The workshops solicited feedback from the individual participants by providing opportunities to comment in small group (breakout group) format and to provide written comments at the workshops, as well as to address comments and questions directly to the IC representatives. Workshop facilitators recorded all comments and questions during the workshop. Many of the comments and questions were repetitive. Some of the comments listed in this document were singled out as characteristic of a group of similar comments. This document summarizes all of the comments received during the comment period.

### **I. GENERAL COMMENTS:**

**Comment 1.** Historic moorings should automatically be given a permit. The historic precedent of having access to boats via moorings as characteristic of a “way of life” in Tomales Bay should be considered and valued in the process. Having a mooring in front of your house is like having a parking space; it’s an essential part of bay life.

*Response:* The representatives of the IC do not agree that permits should be issued automatically and believe that a more important consideration is the re-establishment of a healthy and vibrant ecosystem in Tomales Bay. Under any future Tomales Bay mooring permit system, it is likely that each mooring would have to meet the criteria set forth in the future Vessel Management Plan and the regulatory mandates of the IC agencies.

**Comment 2.** Boaters want boating to remain a quiet and affordable past time in Tomales Bay. They don’t want to encourage vast increases in boating activity, but they also don’t want new programs to exclude people from enjoying boating on the bay because of cost.

*Response:* The IC will take these concerns into consideration in drafting a Vessel Management Plan.

**Comment 3.** Community and boating groups support a private mooring program in which boaters pay for the mooring tackle, own the moorings, and inspect them annually.

*Response:* The IC will consider the community perspective in developing a mooring permit program for Tomales Bay.

### **II. MOORINGS:**

#### **(A) LEGAL AUTHORITY TO REGULATE**

**Comment 1.** The GFNMS interpretation of its regulations regarding moorings fails a common-sense test of the interpretation of the language, i.e.:

- (1) A fixed mooring is not a discharge or deposit,
- (2) It’s not construction because it’s not a structure

*Response:* GFNMS applies the prohibitions against discharging or depositing any material or constructing a structure to mooring buoys and regards this as a reasonable interpretation and application of these regulations. Unlike boat anchors that are placed temporarily and later removed, moorings are installed and can be left indefinitely. Moorings used in Tomales Bay typically include a concrete-filled drum or other weighted structure, a chain or rode, a buoy and attaching hardware, and therefore represent fixed structures in the sanctuary.

**Comment 2.** There is no drilling into the seabed with a conventional mooring used in Tomales Bay. Placing a mooring on the seabed does not alter it any more than placing a cup on a table alters the tabletop, because a mooring anchor sits on top of the seabed and the seabed is not altered. Acknowledge minor displacement of sediment, but the regulation was intended to prohibit dredging- any strict interpretation along the lines of this proposed prohibition would thereby outlaw many legal activities such as fishing sinkers, taking abalone from seafloor, digging for clams, setting crab pots.

*Response:* The weighted structures used in moorings can cause physical changes in the sanctuary seabed through scouring and raking of the seafloor. Chains or other lines that are used as part of a mooring installation can also drag over and alter the seabed. Moorings that were constructed or placed on the seafloor after 1981 are considered unlawful under GFNMS regulations. See response to comment (A) (1).

Most of the Bay floor is covered by mud bottom with an extensive in faunal community; placing large heavy-weighted structures on the muddy bottom of Tomales Bay can interfere with the ecology of the Bay floor, which is an additional reason why moorings in the Bay are being examined.

**Comment 3.** The placement of a mooring is specifically exempt from GFNMS regulation under the exception for anchoring vessels, which is precisely the function of a mooring. 15 CFR section 922.43 provides: “All activities (e.g. fishing, boating, diving, research, education) may be conducted unless prohibited or otherwise regulated.”

*Response:* The exception referred to in the comment applies only to the prohibition regarding altering the seabed but not to regulations prohibiting a discharge or deposit of material or construction. However, NOAA does not regard mooring and anchoring as the same. Anchoring is intended to temporarily maintain a vessel in place whereas mooring installations are designed for longer-term use and involve different designs.

**Comment 4.** There were two meetings in 1998 and 1999 involving agency representatives and some members of the Tomales Bay boating community at which criteria for moorings were discussed. These constituted an agreement about the criteria that would be used for a mooring permit program. The criteria developed during those meetings are the ones that should be applied to any new mooring permit program in Tomales Bay. Furthermore, the notes of those meetings fail to assert that moorings placed after 1981 are considered illegal.

*Response.* The notes from the 1999 meeting characterized the criteria developed in those meetings as an agreement. It was an agreement among the parties present. The notes indicate that the Sanctuary Manager would forward the criteria to the interagency committee for consideration. Other agencies with jurisdiction over Tomales Bay and its resources were not present. The interagency committee did not meet regularly thereafter. It reconvened twice in

2002. It convened again on May 28, 2004 and notes from that meeting indicate that the Sanctuary Superintendent distributed the potential criteria developed in the 1998/1999 meetings for consideration by the committee. The notes from the meeting indicate that the specific criteria were discussed, that it was determined that other agencies needed to be consulted, and that there were concerns about the criteria. Beginning in 2004 and continuing to the present, the agencies are still considering what criteria to apply to moorings in a permit process. No definitive action was taken at the May 2004 meeting and no final criteria were adopted.

**Comment 5.** GFNMS could amend its regulations to obtain unambiguous authority to regulate moorings, but that agency seems reluctant to do this. However, the combined jurisdiction of the CSLC, GFNMS, and other agencies, plus the public trust doctrine articulated in Marks v. Whitney make it possible for the agencies to regulate moorings, both pre and post 1981.

*Response:* Regulatory amendments are an option available to the GFNMS. In the process of drafting the Vessel Management Plan, the GFNMS is considering whether regulatory changes are necessary to enable the Sanctuary to establish a mooring permit program.

**Comment 6.** The agencies should enter into an MOU with one agency specifying their respective jurisdictional powers and collectively delegating authority to one Agency to administer and enforce the policies and regulations that they have drafted.

*Response:* Several agencies with regulatory authority regarding mooring are considering entering into an MOU to permit moorings in Tomales Bay. Some of those agencies may need to amend their own regulations in order to make this possible. None of these agencies can relinquish its authority to oversee the implementation of its regulatory program; therefore, none of the agencies would delegate its regulatory authority to another. However, the agencies understand the need to streamline the mooring permit process and make it as easy as possible for the applicant. The agencies would seek to develop a mooring permit program that balances the applicant's need for convenience with the agencies needs to fulfill their regulatory mandates.

**Comment 7.** The existing exemption from GFNMS regulations for anchoring should have been addressed in the document.

*Response:* The Draft Vessel Management Plan will contain an explanation of the exemption for anchoring in the GFNMS regulations and will clarify the distinction between anchoring and mooring. The anchoring exception does not apply to mooring because they are not the same. An anchor is easily retrievable and provides a temporary fixed location for a vessel. A mooring provides a permanent fixed location to keep a vessel and the equipment that fixes the boat in a certain location.

## **(B) RIGHTS OF LITTORAL PROPERTY OWNERS**

**Comment 1.** The program should support the rights of littoral property owners to moor in front of their residence - failure to do so constitutes a taking. The court's decision in Marks v. Whitney supports the idea that littoral property owners should be accorded the right to a mooring. The agencies should recognize the right of littoral property owners to the privilege of mooring boats in front of their homes. Littoral property owners should each be afforded one

mooring in front of their property, but if they can show more than one vessel in use on the Bay simultaneously, they should be afforded one mooring per vessel. Property owners would have the right to transfer the mooring with the sale of the property.

*Response:* See response to comment I (1). Further, regarding the court's decision in Marks v. Whitney, the court found "Public trust easements are traditionally defined in terms of navigation, commerce and fisheries. They have been held to include the right to fish, hunt, bathe, swim, to use for boating and general recreation purposes the navigable waters of the state, and to use the bottom of the navigable waters for anchoring, standing, or other purposes." The court also reasoned that the public trust pertains to tidelands for "the preservation of those lands in their natural state, so that they may serve as ecological units for scientific study, as open space, and as environments which provide food and habitat for birds and marine life, and which favorably affect the scenery and climate of the area." (Marks v. Whitney, 1971, 6 Cal. 3d 251, 259.) The court's opinion held that the littoral property owner's right "is of course burdened with a servitude in favor of the state in the exercise of its powers over navigable waters..." Regulating moorings in Tomales Bay would not be in conflict with Marks v. Whitney.

**Comment 2.** Without this guaranteed right to a mooring in front of littoral property, there will continue to be "placeholder" moorings maintained by littoral property owners (i.e. moorings maintained just for the sake of keeping the right to have a mooring). Recognizing property owners' rights will reduce the number of moorings (i.e. placeholder moorings will be removed).

*Response:* State Lands Commission must permit all moorings, regardless of when constructed or placed on the seafloor. All moorings, including "placeholder moorings," that were constructed after 1981 are considered unlawful under GFNMS regulations and would be subject to removal. Moorings could be subject to removal once an overall solution to mooring has been adopted by IC member agencies.

**Comment 3.** Moorings interfere with the rights of littoral property owners by being too close in proximity to the shore or being too numerous and obstructing views of the bay.

*Response:* This will be taken into consideration by the implementing agency(s).

**Comment 4.** Property owners don't need to lose the mooring if they threaten eelgrass, just move it.

*Response:* As stated in I (1), there is no guaranteed right to a mooring. Assuming a mooring permit system is adopted, vessel owners would need to apply for permits and the permit agency(s) would need to determine where the moorings may be located based on the criteria that would be contained in the draft Vessel Management Plan.

**Comment 5.** Providing rights to all littoral property owners will exceed carrying capacity of the bay. Instead, current mooring owners should be grandfathered in to receive an individual mooring permit. Littoral properties should not be deemed to have a right, per se, to a mooring.

*Response:* Consideration will be given to the question of how many moorings would be permitted in the bay. No current mooring owner would be granted automatic right to a permit.

## **C. CRITERIA FOR PROTECTION**

### **General comments on criteria**

**Comment 1.** Criteria for protection of seagrass, navigation, shallow waters, and seal haul-outs will have the combined effect of preventing the use of established anchorages needed for safety and the first three should be eliminated because boaters strive never to drop anchor in these places.

*Response:* Mooring is not anchoring. The mooring program will not impact opportunities for finding safe anchorages. If a mooring permit program is adopted, it would not address anchoring, it would address mooring issues. The GFNMS, as a member of the IC, will ask the SAC to consider the need for safe mooring locales in their recommendations for a possible mooring permit program.

**Comment 2.** Boaters need safe places to moor and safe equipment on which to moor boats. In siting mooring fields, agencies need to consider protection from strong northerly and southerly winds and need to develop criteria for mooring locales and mooring equipment that address these concerns.

*Response:* The GFNMS, as a member of the IC, will seek additional input from the SAC and its Working Group on Tomales Bay Vessel Management regarding locating mooring fields in light of this concern. The SAC will be asked to recommend criteria for mooring field locations that consider safety and weather. In terms of mooring equipment, the SAC is being asked to recommend a pilot program to test various types of mooring tackle that have been identified as more likely to protect the benthic habitat of Tomales Bay. The pilot test will be conducted to help determine whether there are viable alternatives to the traditional mooring tackle currently used in Tomales Bay.

### **Seagrass protection criteria**

**Comment 3.** By relying on scientific studies of the impacts of moorings on seagrass from places like Australia, the agencies have failed to demonstrate that moorings negatively impact seagrass in Tomales Bay.

*Response:* The view that moorings can have a detrimental impact on seagrass beds in Tomales Bay is based on the best available scientific information and data, which includes the studies from Australia, as well as Italy, Rhode Island, the Chesapeake Bay, and San Francisco Bay. Several agencies are required to protect seagrass beds in Tomales Bay and do so using best available data. The Department of Fish and Game is required to ensure that there is no net habitat loss of sensitive habitat. Consistent with its resource protection mandate under the National Marine Sanctuaries Act, the Sanctuary employs the highest level of protection.

The GFNMS is planning to meet with a group of seagrass experts to review scientific information regarding seagrass and mooring impacts, and to help answer questions posed by the varied community interests represented by the SAC Working Group. Based on past surveys of moorings conducted by the IC, and consistent with the comments received from the public, the agencies believe that few existing moorings in Tomales Bay are located in eelgrass beds.

Therefore, if the seagrass protection criteria that were presented in the “Document for Public Input” were implemented, they would not impact a majority of existing moorings.

**Comment 4.** The agencies should determine that mooring shall not damage seagrass beds and shall not have greater than a negligible effect on marshes, mudflats or environment of Tomales Bay- to this end, a mooring shall not be deemed to damage a seagrass bed if its installation, maintenance or use does not result in greater than negligible effect on the seagrass in the immediate area of the mooring, or only results in a short-term effect on seagrass in the immediate area, or the same or less impact than the setting and recovering of an anchor (except in seagrass protection zones), or if the mooring, together with all other moorings with similar characteristics has a negligible adverse effect on the health of the seagrass when considered in relation to all other permitted on-the-water activities in Tomales Bay, including activities of recreational boaters, oyster farming, and commercial herring fishing. The lead agency should have the opportunity to determine at some later point that a mooring is impacting seagrass and thereby is out of compliance, based on new scientific studies.

*Response:* See response to comment II (C)(3).

**Comment 5.** Since the number of moorings in eelgrass is few, they should be grandfathered until the mooring is scheduled for renewal (at which time they should be located outside the eelgrass unless the mooring owner provides scientific evidence showing that there is no harm to eelgrass). Determining harm should not be based on a comparison to other uses that cause harm.

*Response:* No unpermitted moorings in eelgrass, or anywhere in Tomales Bay, will be “grandfathered” in. A comprehensive mooring permit program would consider all mooring locations, without exception, based on the criteria adopted for the permit program.

**Comment 6.** Agencies need to demonstrate the need to protect seagrass in Tomales Bay based on local findings / studies – study impacts of existing moorings- consider that other factors might be effecting eelgrass, such as biological factors- mooring in eelgrass may require a specific type of mooring. The fact that increase in number of boats has been accompanied by increase in range of seagrass calls into question the need to prohibit mooring in seagrass. Call on agencies to conduct targeted scientific studies on the impact of boats moored in seagrass on Tomales Bay to determine if there is a problem and if there is to develop strategies to best address the problem. Suggest that such studies include at least one boat moored on a helical mooring to address the issue of shading.

*Response:* See response to comment II(C)(3).

**Comment 7.** The 100 foot buffer for seagrass protection is too restrictive, especially where a mooring is in deep water. The depth of water is a more important measure.

*Response:* The IC will consider the depth of water in lieu of a buffer. The GFNMS will ask the seagrass experts mentioned in response II(C)(3) how best to provide a protective criteria for seagrass.

**Comment 8.** Disagree with the locations of seagrass on the maps, where’s the science?

*Response:* The data used to develop the maps is based on data provided by the Department of Fish and Game aerial photos, herring and spawning ground surveys, 2 aerial photos that were translated to GIS information, and boat and mooring surveys conducted between 1992 and 2002. The IC is investigating options for updating the seagrass bed boundary information upon which the maps were developed.

**Comment 9.** How much eelgrass does the Bay need to be healthy?

*Response:* It is the goal of all the management agencies to improve the health of the Bay and therefore it is a goal to minimize impacts to eelgrass. Eelgrass is just one of the many natural resources of the Bay and a healthy Bay is contingent on many factors including water quality, habitat and species diversity and abundance. If ongoing surveys show a trend of continuing net loss of eelgrass, this could have adverse impacts on the Bay.

**Comment 10.** We need education about eelgrass (location, need to protect) but not regulation.

*Response:* Representatives of the IC agree that education about the need to protect eelgrass and its role in maintaining a healthy ecosystem is one of the important actions needed to protect eelgrass.

**Comment 11.** Existing seagrass beds should be a priority for protection- mooring should be allowed in areas outside of seagrass.

*Response:* Representatives of the IC agree that seagrass beds need to be a priority for protection in combination with other established criteria.

**Comment 12.** Boats can moor without damaging seagrass- the shading issue is a minimal concern.

*Response:* See response II(C)(3). The seagrass expert panel described in response II(C)(3) will review criteria for protecting seagrass.

**Comment 13.** Seagrass is thriving and growing in Tomales Bay and does not need protection from the small amount of boating taking place in the Bay.

*Response:* See response II (C)(3). The seagrass experts described in response II(C)(3) will review criteria for protecting seagrass.

**Comment 14.** The science presented is not transferable to Tomales Bay because the conditions are different (our waters are not clear and are shallower).

*Response:* See response to comment II(C)(3)

**Comment 15.** The agencies should provide some photographic documentation of the condition of eelgrass around moorings.

*Response:* The IC will address this concern with the seagrass experts. However, the dynamics of the bay (winds, tides, and turbidity) present a challenge. Photographic documentation of such conditions exists for Richardson Bay, as provided below (taken from the San Francisco-Oakland



Bay Bridge East Span Seismic Safety Project document, “Pre-survey Screening Model and Eelgrass Survey Results”).



### **8-foot depth restriction**

#### **Comments 16-20.**

- There is no scientific evidence provided to support the 8 foot depth restriction- propose eliminating this criteria.
- Less than 8 feet should be OK during the summer, but different depth restrictions might apply in different places (i.e. eelgrass does grow at different depths in different places).
- What’s the basis for this restriction? Vessel draft needs should be considered. The restriction should be 12 feet or less.
- This restriction is arbitrary and unwarranted because boaters would not wish to moor in such shallow areas.

*Response:* This criterion was developed to protect the seafloor from benthic habitat damage caused by boat scraping and propeller scarring. The IC considered the feedback received on this proposed criteria and is considering a criteria wherein depth will be considered on a case by-case basis based on boat size and draft.

## Aquaculture buffer

**Comment 21.** There is not a valid rationale for the set back (i.e. buffer) around aquaculture because moored boats are not likely to be a source of discharge. Passing boats present a greater risk. Oyster companies should enter into an MOU with the mooring permit holder to allow a distance of less than 300'. The Marin and CA Depts. of Public Health should work with boaters and oyster companies to adopt more flexible regulations that will protect water quality and public health while also providing for recreation.

*Response:* Moored boats are viewed as a potential source of discharge, and while there might not be a high probability of discharge, there is still a possibility. To the extent that the risk to food safety and public health can be minimized, agencies will take the precautionary approach to citing moorings near mariculture operations. Please see “MANAGEMENT PLAN FOR COMMERCIAL SHELLFISHING IN TOMALES BAY, CALIFORNIA” published by the California Department of Public Health (CDPH) in January 2008 for more information about the concerns related to the potential threat to aquaculture posed by moored vessels. The IC recognizes the potential threat posed by transient boaters and plans to address these concerns through education targeting visiting boaters.

The National Shellfish Sanitation Plan (NSSP) does not allow the use of the *Conditionally Approved* classification in areas where potential pollution sources are unpredictable and therefore unmanageable. The potential for overboard discharge from unregulated moorings in proximity to a shellfish growing area represents an unpredictable, and therefore unmanageable, source of pollution that would result in closure of the growing area. Boating traffic passing through or in proximity to a shellfish growing area represents another form of unpredictable potential impact. CDPH reevaluates these sources as conditions, including boating activity, change.

**Comment 22.** There should not be an assumption that all boats over 23' are live-aboards. It presumes only boats moored near a lease can expose the area to illegal waste discharges, but those in transit can do the same. It significantly restricts moorings in Marconi Cove and Chicken Ranch Beach. It pits recreation against mariculture- logistically; Marconi Cove and Chicken Ranch have been used for mooring because of the suitability of the sites for boaters. Suggest instead that the Department of Health sign an MOU that mooring holders would sign if their moorings were within the proposed setback.

*Response:* There is no assumption that all boats over 23 feet are live-aboards. The IC will address the potential threat caused by transient boats through an education and outreach program that targets visiting boaters as well as residential boaters. The IC is also reconsidering the buffer for aquaculture in light of CDPH concerns for public health and safety of commercial shellfish growing areas in Tomales Bay. A new criterion is likely to be proposed. Furthermore, CDPH does not permit or regulate moorings or marinas and could not enter into individual MOUs. CDPH's authority involves regulation of commercial shellfish growing areas and the companies that have been issued certificates.

**Comment 23.** Supports the 300-foot setback, unless leaseholder agrees to closer proximity.

*Response:* The criterion proposed was a 100-foot buffer around aquaculture. The set-back or buffer approach has been reconsidered by the IC and will not be used. The standard that would be applied will be determined by the CDPH. The CDPH has a mandate to protect public health and is not authorized to delegate its regulatory authority to a leaseholder. Currently, they have suggested the current standard: “safe distances between moorings and aquaculture leases are based on the number of vessels and volume of water surrounding each vessel relative to fecal coliform (FC) dilution to safe levels (below a most probable number of 14 FC per 100 milliliters). Consideration may also be given to reduction of potential enterovirus loads.”

### **Wildlife Disturbance**

**Comment 24.** Laws are in place to prevent wildlife disturbance. Therefore, education of boaters about the law and the needs of resting seals and roosting birds is the best means for protecting wildlife. The success of the NPS / GFNMS program in the late 1990s is attributable to the fact that it was an education program. Buoying off seal haul-out areas would be ineffective.

*Response:* The recommendation is to provide a safe distance for moored vessels, because people on a moored boat can disturb harbor seals. The 300 foot buffer is a guideline established by the National Marine Fisheries Service. Since it is illegal to disturb harbor seals per the Marine Mammal Protection Act, agencies charged with protecting wildlife resources in Tomales Bay have a mandate to provide greater protection from moored vessels than simply to rely on boater education. However, wildlife protection issues will be incorporated into the education program that the IC develops.

**Comment 25.** Support the seal haul-out criteria

*Response:* Noted.

### **Swimming Beaches**

**Comment 26.** Consider vessel speed restrictions to protect public safety

*Response:* The IC will consider such restrictions in addition to the buffer zone proposed to protect swimming beaches.

**Comment 27.** Support these criteria.

*Response:* Noted.

### **Navigation Channels**

**Comment 28.** Support these criteria

*Response:* Noted.

## **(D) MOORING TACKLE**

**Comment 1.** The criteria for mooring construction should follow those agreed to in 1998-1999 meetings.

*Response:* See response to comment II (A) 4.

**Comment 2.** The statement in the document that “many moorings are poorly constructed and displace the natural habitat of the sea floor” is inaccurate. Most moorings are not interfering with seagrass beds. Again, there is no scientific basis for asserting impacts to seagrass beds. Lake Tahoe studies demonstrate that moorings have a neutral or net benefit with respect to habitat.

*Response:* With respect to the comment that moorings do not impact seagrass beds, and the science that the agencies use to determine there’s a potential impact, refer to the response to comment (II)(C)(3). Information about the construction of moorings placed over time is based on reports from persons that have placed moorings over the years and the knowledge and personal observations by agency staff and officials.

**Comment 3.** Concrete drums have been time tested as worthy of the harsh weather conditions in the bay and that helical moorings being considered by the GFNMS present a dearth of scientific data and are untested in the bay. A member of the TBBA used a helical mooring for a boat in Oregon and spent \$3,000 to install and it failed twice by pulling out of the silt bottom during heavy winds.

*Response:* The IC will implement a pilot program to test the effectiveness of mooring systems that might be developed for Tomales Bay and recommend criteria for acceptable moorings. Its goals are to develop a mooring system that protects habitat, prevents wildlife disturbance and protects public health and safety.

**Comment 4.** Helical or other exotic moorings are untested on the bay. Potential problems are: very little scope between the mooring and the buoy, the steep chop and short minute of storm waves on Tomales Bay will strain the boat’s hardware significantly more than a conventional system which allows for more strain on deck fittings to be absorbed by the 6:1 scope used in current mooring designs on the bay. The mud and silt may reduce the holding power of helical moorings, whereas it increases the holding power of deadweight moorings. Propose that the GFNMS institute a pilot program by installing several helical (and/or other experimental moorings) for transient use.

*Response:* Representatives of the IC agree with this comment and plans to institute a pilot program.

**Comment 5.** Pilings used for moorings. Lawson’s Landing has reported using pilings made of untreated eucalyptus that do not leach toxic metals. They have also reported that the footprint is 1 square foot and they are not located in seagrass. Therefore, making these moorings acceptable for mooring. In addition, the pilings are included in the lease from CSLC.

*Response:* The pilings are in an area being considered for a mooring field, if a permitting program is implemented. This information will be considered in the draft Vessel Management Plan.

**Comment 6.** Criteria for tackle:

- Tackle must meet Coast Guard requirements.
- Anchors must either be concrete cast in a suitable clean container with suitable attachment gear or be a design approved by the Agency (CSLC).
- Scope of rode of a conventional mooring will be between 4 to 1 and 6 to 1, based on MHW.
- Where a conventional moorings with a chain rode would result in excessive disturbance to the environment, a helical or other specialized mooring anchor and rode may be used.
- Each registered mooring float shall have a durable tag provided by the Agency showing registration number and any limitations as to size of vessel, expiration date for registration, and telephone number of owner.
- Mooring owners shall inspect chains and hardware at least annually and mooring anchors on a schedule appropriate for type of anchor and location. Mooring owners are responsible for maintenance. Agency may require certificates of inspection, maintenance, and compliance.

*Response:* IC will consider these suggestions.

**Comment 7.** Moorings should be below the seafloor type anchoring systems in order to prevent disturbance to the seafloor, unless applicant presents scientific evidence to show that their proposed mooring has less environmental impact than below the seafloor type systems.

*Response:* The IC will consider this suggestion.

**Comment 8.** There should not be one prescribed mooring type. Moorings are about safety. Consider different designs. The owner of a vessel should be the owner of a mooring and responsible for meeting criteria, but not only using one design. The transitional concrete barrier / chain mooring in sand / mud bottom does not constitute an environmentally damaging system and should not be banned.

*Response:* IC will consider these suggestions.

**Comment 9.** Develop criteria for mooring tackle, but no standardization of the kinds of tackle that can be used. The permit holder should be responsible for suitability, installation and maintenance of the mooring.

*Response:* IC will consider these suggestions.

**Comment 10.** The float design should be standardized and the permit number displayed on the float. Some suggestions for float design include using a pick-up float on a mooring pendant that should be made from hard plastic. It is very durable and virtually unsinkable. Agencies could remove any mooring that does not display the permit number. The permit owner would be responsible for insuring that agencies have current information on the ownership and location of permitted moorings.

*Response:* The IC will consider these suggestions.

**Comment 11.** Moorings compatible with eelgrass encroachment must be developed. The elastic mooring is too expensive for local boaters. A pilot program should study the few moorings types that currently exist over eelgrass and the environmental conditions under which they function. Could employ a refinement of concrete filled barrels where the line stays off the eelgrass, has elasticity to prevent damage to the boat and diminishes the effect of the boat's shadow. To hold the rode off the eelgrass, use a series of floats along its length, spaced so that the sections of rode between them would hang in loops with touching eelgrass at low tide. In contrast to the short elastic mooring, the length of line in the mooring would permit the boat to move about in a large area, thus casting less shadow per unit of time on any one patch of eelgrass.

*Response:* The IC will consider these suggestions.

## **(E) MOORING FIELDS**

**Comment 1.** Historic moorings should be recognized.

*Response.* See the response to comment I (1).

**Comment 2.** The 2 proposed mooring fields (Marshall Boat Works / Reynold's Cove, and Lawson's Landing) are not sufficient to safely or reasonably accommodate the number of vessels that are currently moored on the Bay.

*Response.* The IC is considering this comment and suggestions provided during public comment for other mooring field locations. Furthermore, the IC is considering allowing mooring in mooring fields and permitting moorings outside of mooring fields, considered on a case-by-case basis.

**Comment 3.** The proposed mooring fields will not allow for a reasonable increase in moorings, which should be a priority for agency mandates to provide recreation.

*Response:* The IC will consider whether reasonable accommodation will be given to increases in moorings.

**Comment 4.** There should be a process that allows individuals (non-littoral property owners) to apply for mooring permits.

*Response.* Based on feedback provided by the public, the IC has determined that it will work toward providing a mooring field mooring option and investigate an individual mooring permit that would be considered on a case-by-case basis.

**Comment 5.** The Marshall Boat Works site is at capacity. Additional moorings there would require boats to be further out in the bay which would make them more exposed to weather and increase congestion thereby threatening damage from boats swinging into one another.

Regarding the Reynolds mooring site that was proposed, some residents have expressed concern about their view being impeded by too many boats in the cove.

*Response:* The IC will consider the issues of capacity and scenic resources.

**Comment 6.** Both Marconi and Fishermen's cove could support more moorings. West Shore options: need a mooring area on the west shore for residents on that side. Chicken Ranch Beach is a good west side option because it offers the best protection from southerly winds, the worst weather condition for moored boats. There is an area of deeper water (a channel about 50 yards wide with a MLLW of approx. 11') that starts well off Chicken Ranch Beach and extends north to the point almost adjacent to shell beach- this area could support a mooring field although it would need to consider the path of the Inverness Yacht Club boat races. Concerns about seagrass could be addressed by locating moorings beyond seagrass. You need to determine a reasonable distance for paddling out a dingy.

*Response:* The IC considered these suggestions. Pt. Reyes National Seashore has determined that it would consider allowing a mooring field in the Chicken Ranch Beach area. The IC will give additional consideration to these suggestions.

**Comment 7.** There are 9 settlements on the east shore and the 3 proposed mooring fields would exclude access to near-home moorings for some of the homeowners in those settlements. More mooring areas are needed near homeowners.

*Response:* The IC determined that it will seek to provide a mooring field on the west side and also committed to investigating the option of allowing individuals to apply for mooring permits on a case-by-case basis as long as the mooring area fits within the established criteria.

**Comment 8.** Against mooring field approach, prefer the case by case.

*Response:* At present, both approaches are being investigated for the draft Vessel Management Plan.

**Comment 9.** A mooring field only approach would result in overcrowding of MBW and Reynold's Cove mooring fields and that the proposed mooring fields alone do not provide adequate mooring opportunities. Chicken Ranch should be considered for a mooring field. Golden Hinde could be dredged to accommodate moorings.

*Response:* Overcrowding will be avoided since an analysis of mooring size, number, spacing and location will be conducted before a mooring field would be established. The IC is investigating other potential locations for mooring fields. Additional sites would offer additional mooring options. Regarding Chicken Ranch, see II (E)(6).

## **(F) PROPOSED PERMITTING PROGRAM**

**Comment 1.** CSLC should administer the program.

*Response:* The IC is in the process of considering establishing permitting options. The IC will determine the appropriate agencies to administer these programs.

**Comment 2.** The expeditious removal of derelict and abandoned vessels is a positive step.

*Response:* Representatives of the IC appreciate your support for the work that has been and continues to be conducted on this issue.

**Comment 3.** Enforcement of regulations that require boats to display current registration or documentation is appreciated.

*Response:* Representatives of the IC appreciate your support for the work that is being done.

**Comment 4.** The CSLC should be the lead agency in implementing a mooring registration and permitting process modeled after the Lake Tahoe program.

*Response:* See response to comment II (F) 1

**Comment 5.** Regulations and/or high permitting costs may have a negative economic impact on the area by reducing the number of boaters that support the local boat yard, restaurants, and stores.

*Response:* The IC acknowledges that costs should be considered in developing the permit program. Currently, no permit costs have been determined and there is no way to determine fiscal impacts on the local economy at this time.

**Comment 6.** Support the Tomales Bay Watershed Council's Technical Advisory Committee (TBWC TAC) on Boating proposed mooring regulations and elements of Lake Tahoe's "Blue Boating" mooring regulations.

*Response:* The IC will consider the TBWC TAC's proposed mooring regulations and permit program and investigate the Blue Boating program.

**Comment 7.** The agencies should focus on developing a program that is cost conscious and does not exclude boaters from access to boating on Tomales Bay due to regulatory costs. Concerned that requiring the installation and maintenance of helical moorings and/or commercial synthetic rode would significantly and unnecessarily increase expense to mooring holders. Concerned that regulations and or high permitting costs will have negative impact on the area by reducing the number of boaters that support local businesses. Propose a one time fee of between \$150 and \$300 and annual fee of \$100, generating revenues (based on 150-200 moorings) of \$22,500 - \$60,000 and between \$15,000 - \$20,000 each year in annual fees, plus any additional fees for new moorings. This would be in the budget of most mooring owners currently on Tomales Bay.

*Response:* See response to comment II (F)(5). The IC will consider these concerns and suggestions when it proposes a permitting program.



**Comment 8.** Existing moorings as of August 31, 2007 should all be permitted, if in compliance with mooring criteria. If not in compliance, the owner can apply to transfer location. Agency must establish process for permitting new moorings. Registration would be good for 5 years and then up for renewal. Fees would be \$300 for initial registration and \$100 annual renewal fee. Moorings are transferable for a max. price of \$2,000. New owner must register. Moorings cannot be sub-leased.

*Response:* See response to comment I (1). The agencies do not have policies that allow transfer.

**Comment 9.** A case-by-case permit program is a good idea. Which agency(s) would an individual need to apply to for a mooring permit? The permit process should be streamlined and there needs to be just one contact person.

*Response:* The IC's goal is to streamline the permitting process to the greatest extent possible.

**Comment 10.** Agencies should permit existing moorings. There should be an amnesty for existing moorings that are not in seagrass or polluting the bay (grandfather in).

*Response:* See response to comment I (1). The draft Vessel Management Plan will identify the criteria that will be used to determine whether a proposed mooring will be permitted.

**Comment 11.** All areas outside the protected areas should be available for mooring.

*Response:* The IC considers the mooring criteria as creating protected areas and criteria for protection. Each agency with permitting authority will have to consider each mooring application. There is no automatic right to moor a vessel.

**Comment 12.** Pre-1981 moorings should be permitted.

*Response:* Although, the GFNMS has no jurisdiction over moorings established pre-1981, CSLC has jurisdiction over the entire bay, and, depending on the location of a mooring, other agencies may have jurisdiction as well. Therefore, all moorings need to be permitted by the appropriate agencies.

**Comment 13.** The Interagency Committee has an interest in determining a cap on the number of moorings in Tomales Bay, based on determining the "carrying capacity" of the bay for moorings. They extrapolate using the Tahoe cap. The surface area of Lake Tahoe is 122,200 acres and they are proposing a cap of 6,316 moorings (approximately 1 boat per every 20 acres of lake). The surface area of Tomales Bay, which is 6,800 acres. The ratio of 20 acres per boat would yield between 250-350 moorings.

*Response:* The goal of this process is to determine the resource protection needs for Tomales Bay. If a permit system is implemented, it would be based on the final criteria for resource protection provided in the draft Vessel Management Plan. The agencies are not concerned with establishing a cap, but rather in protecting the resources of Tomales Bay.

## **(G) LOCATIONS OF MOORINGS:**

**Comment 1.** Moorings should be placed apart at a distance equal to the combined distance of two turning radius.

*Response:* The IC will develop a proposed safe distance for mooring placement for the draft Vessel Management Plan.

**Comment 2.** There is a need for moorings on the west side of the bay to accommodate residents on the west side.

*Response:* See response to comment II (E) (6).

**Comment 3.** Marconi is a good place for a mooring field, ramp, discharge facility and storage.

*Response:* The IC is assessing this location.

**Comment 4.** Site acceptable moorings in protected areas (i.e. consider having some moorings in seagrass that are soundly constructed and will prevent seagrass destruction).

*Response:* A Working Group has been formed to discuss mooring design and tackle. An analysis of mooring size, number, spacing and location will be conducted before a mooring field would be established.

**Comment 5.** Consider the possibility for short-term use of moorings in seagrass beds that are designed to protect the resource.

*Response:* The IC will investigate the possibility of limited short-term use of moorings in seagrass beds that are designed to protect sensitive resources.

## **(H) DRY STORAGE AND OTHER STORAGE OPTIONS**

**Comment 1.** There should be no additional construction of boat launching facilities in Tomales Bay as this would encourage more motor boats and vehicular traffic and would incur additional impacts to the ecosystem and fisheries.

*Response:* The IC will take this concern about increasing traffic and additional impacts from dry boat storage under advisement.

## **(I) OTHER MOORING CONCERNS:**

**Comment 1.** Moorings should be available for non-residents.

*Response:* Representatives of the IC agree with this comment.

**Comment 2:** Change “illegal” to “unpermitted” in the Draft Vessel Management Plan.

*Response:* The IC disagrees. After the GFNMS was designated in 1981, the Sanctuary did not have the authority to grant permits for moorings. Therefore, post-1981, moorings were placed illegally (i.e without authorization from the Sanctuary) and in most cases pre-1981 moorings were installed without the required lease from the CSLC.

**Comment 3:** All moorings, regardless of when installed, should have to meet the same criteria.

*Response:* Representatives of the IC agree with this comment.

**Comment 4:** The maps in the document for public input include many oyster farm moorings.

*Response:* The IC will update the maps pending a new survey and indicate where moorings are located in mariculture.

### **III. SEWAGE DISCHARGES:**

**Comment 1:** It is erroneous to assume that the fact that the Bay is designated as an impaired water body for fecal coliform has anything to do with boats, since the San Francisco Regional Water Quality Control Board monitoring report results point to sources other than boating, and the California Critical Coastal Areas data compiled June 9, 2006 shows no evidence of boats on Tomales Bay discharging untreated human waste. These claims are inaccurate. Local boaters would not discharge untreated human waste as they are very aware of the potential impacts and it is not difficult, given the narrow configuration of the Bay, to use shore-side facilities. It is entirely possible that boats from outside of the area are capable of this practice, but that with education and adequate facilities, the problem could be solved.

*Response:* The document did not assert that the impairment was directly caused by boat sewage discharge. The document stated that vessel discharges are one of the potential sources of pathogen contamination in Tomales Bay. The IC agrees with the conclusion that this problem is best prevented through the provision of boater education and adequate facilities.

**Comment 2:** The presumption in the document that the Bay supports 30-40 live-aboards is erroneous and that the bay contained over 100 derelict vessels is also erroneous.

*Response:* The document included no such statements. Regarding live-aboards, the following statement is made in the document: "In addition to recreational uses, there may be a few seasonal-use live aboard vessels moored in the Bay." Regarding derelict vessels, the document indicates that past surveys by IC participating agencies had estimated there were approximately 30 derelict vessels in the Bay in 2004. However, the document describes local enforcement agency efforts to encourage boat registration by tagging the boats as well as some removal of derelict boats. The document includes the following statement: "As a result of the tagging and removal operations, the Sheriff's Department believes there are currently 2 or 3 remaining derelict vessels in Tomales Bay."

**Comment 3:** Suggestions for controlling sewage from small boats and kayaks: wag bag technology being used by kayak companies; education on shore-side facilities; port-a-potty dump stations at Lawson's Landing and Miller Park. Larger boats: there is a critical need for a deep draft pump-out and oily bilge station on the Bay. Acceptable locations include Marshall Boat Works, NPS Pier at Sacramento Landing, and Marconi Cove. Sacramento Landing offers protection from the prevailing northwesterly and thus makes its use more likely- approaching the pier at Marshall Boat Works is often difficult.

*Response:* GFNMS, as a member of the IC, will seek additional input from the SAC regarding these suggestions. The SAC will likely forward a request to the Tomales Bay Vessel Management Working Group for input. The Working Group would make recommendations to

the SAC and the SAC would deliberate and provide recommendations to the GFNMS Superintendent who will then forward them to the IC.

**Comment 4:** The honey barge or tapping into a shore-side septic system is neither practical nor cost effective for Tomales Bay.

*Response:* GFNMS, as a member of the IC, will seek additional input from the SAC regarding this comment. The SAC will likely forward a request to the Tomales Bay Vessel Management Working Group for input. The Working Group would make recommendations to the SAC and the SAC will deliberate and provide recommendations to the GFNMS Superintendent who will then forward them to the IC.

**Comment 5:** Designation of Tomales Bay as a No Discharge Zone is appropriate once operational waste disposal facilities are in place.

*Response:* Representatives of the IC agree.

**Comment 6:** Additional shoreline and restroom facilities are needed at Marconi Cove (concrete pit latrine), Marshall Boatworks (restroom), White Gulch (perhaps a composting toilet installed by PRNS), Blakes Landing / Clark Road (port-a potty, Cal Trans). Pack-it-out supplies and support needed for kayakers and campers. Dump stations for vessels with port-a-potties at Golden Hinde marina, Lawson's Landing, Marconi Cove, Marshall Boatworks, Miller Park Boat ramp. Pump-out station needed for vessels with holding tanks: Sacramento landing (first choice), Marconi Cove, Duck Cove.

*Response:* GFNMS, as a member of the IC, will seek additional input from the SAC regarding these suggestions. The SAC will likely forward a request to the Tomales Bay Vessel Management Working Group for input. The Working Group would make recommendations to the SAC and the SAC would deliberate and provide recommendations to the GFNMS Superintendent who will then forward them to the IC.

**Comments 7:** There should be a sewage and a bilge pump-out in Sacramento landing. Additional restroom facilities are needed. There is a need for education and facilities for kayakers. There are only 2 pit toilets for kayakers and port-a-potties need more maintenance over the weekends. There is a need for more port-a-potties on the west side. Commercial kayakers get education, but camper/kayakers need more information at the campsite and along with the permit. There needs to be more than one pump-out station (Inverness, Marshall, Dillon). Consider using "wag bags" for small boats, with chemical dehydration system. Very few boats are large enough to require a sewage pump-out, 90% use portable potties and need dump stations.

*Response:* GFNMS, as a member of the IC, will seek additional input from the SAC regarding these suggestions. The SAC will likely forward a request to the Tomales Bay Vessel Management Working Group for input. The Working Group would make recommendations to the SAC and the SAC would deliberate and provide recommendations to the GFNMS Superintendent who will then forward them to the IC.

**Comment 8:** Composting toilets should be used around the bay for boaters- they minimize pollution and consume less water than chemical and flush toilets.

*Response:* GFNMS, as a member of the IC, will seek additional input from the SAC regarding these suggestions.

### **III. OTHER DISCHARGES:**

**Comment 1:** An oil bilge pump-out is needed to address the problem of petroleum products being discharged in the bay as well as boater education regarding environmentally appropriate cleaning agents and maintenance products.

*Response:* Representatives of the IC agree and a Working Group is being tasked with developing recommendations to the SAC for both the services and education to meet these needs.

**Comment 2:** An oily bilge pump is not realistic due to dependence on staffing and a likelihood that there would be trouble with fuel and or soap contaminated bilge wastes.

*Response:* Representatives of the IC share these concerns. In siting environmental services for boaters, agencies would need to address these concerns.

**Comment 3:** Boaters using Tomales Bay need a good education program- local community should be involved in design and implementation of the education program.

*Response:* Representatives of the IC agree and that is the reason a Working Group, which includes local community members and boaters, is being asked to draft a suggested boater education plan to recommend to the SAC.

### **IV. INVASIVE SPECIES:**

**Comment 1:** The only threat of introduction of invasive species from boats would be visiting or transient boats, since the boaters that keep their boats on or near the bay never leave the bay and would not therefore take invasive species into their boats bilge. Therefore, the need is for education of transients in the bay.

*Response:* Education of all boaters that use the bay is critical to preventing the introduction of invasive species.

### **V. ANCHORING RESTRICTIONS:**

**Comment 1:** Anchoring restrictions more devastating than mooring restrictions. During N. winds, White Gulch, Sacramento Landing, and Marshall should be included as anchorages- during S. winds, Lairds Landing Pelican Pt should be included as anchorages. Where there is safe anchoring for wind conditions, there are seagrass and seal haul-out areas.

*Response:* This document does not address GFNMS proposed seagrass anchoring prohibitions.

**Comment 2:** Anchoring is mooring- how do we differentiate? Recommend adding an anchoring exception to the plan but need to state that anchoring is mooring.

*Response:* See response to comment II (A) (3). Mooring is not anchoring. A mooring is a fixed installation and an anchor provides a temporary method of holding a vessel in place. With a mooring, the tackle remains fixed in place when the boat unties from the mooring buoy. An

anchor is not intended to be permanently fixed to the seafloor like a mooring. It travels with the vessel when not in use.

## **VI. OTHER BOATING ISSUES RAISED AS CONCERNS:**

**Comment 1.** Consider how to deal with rent aboards, jet skis, tour boats and other commercial boats before we have a big influx in Tomales Bay.

*Response:* Current regulations prohibit the use of jet skis in Tomales Bay. The IC will consider the other issues. If there are commercial operations in National Park Service waters, there needs to be a commercial use operation permit. Commercial use also requires a state lease through CSLC.

**Comment 2.** Regarding live-aboards, these policies are suggested:

- Any boat moored on Tomales Bay that is used for a dwelling for more than 10 days of any 30 is classified as a live-aboard. Live-aboards are prohibited on moorings and subjects mooring permit holder to revocation of permit.
- Any boat anchored in one location and used as a dwelling for 10 days out of 30 is classified as a live-aboard and is prohibited on Tomales Bay.
- Any vessel whose design is not considered specifically for navigation will be deemed a houseboat. Houseboats are prohibited on Tomales Bay.
- Commercial fishing boats are exempt from these provisions for a period of 3 months in any 12-month period.

*Response:* Current regulations of the Federal, State and Local Government address these issues and this information will be added to the draft Vessel Management Plan. The Working Group will be informed of these regulations and will be asked to provide recommendations as to how to incorporate this information in future boater education and outreach.

## **VII. COMMENTS ON PROCESS FOR MOVING FORWARD**

**Comment 1:** A flowchart and milestones should be provided for any regulatory process.

*Response:* Representatives of the IC agree.

**Comment 2:** The agencies need to build trust, don't make the process "top down."

*Response:* The GFNMS has established a Working Group that includes representatives of homeowners association, community groups, conservation interests, commercial fishermen, representatives of tourism-related businesses and boating businesses. The Working Group will be asked to provide recommendations to the SAC regarding issues raised during the public input process. The SAC will make recommendations to the GFNMS. The IC plans to consider the recommendations made to the GFNMS from the SAC. The IC also conducted a much more detailed public input process than is usual for developing a management plan.

**Comment 3:** Public education is the best approach to solving these problems- a CD with the state / federal sensitive areas or a website should be available- Education is one of the tools that can be used to help solve these problems.

*Response:* Representatives of the IC agree.

### **QUESTIONS POSED:**

- Is there a difference between impacts of anchoring and mooring in eelgrass?

*Response:* There are differences and similarities. Mooring impacts include scouring of seagrass by the chains or rodes used to secure a vessel on the mooring as well as shading caused by vessels. Anchor arms and chains can scrape the seagrass, and anchor arms can pull out seagrass rhizomes. Therefore, damage associated with scraping is common to both anchoring and mooring. Damage to rhizome systems is common to anchoring and mooring and both can cause long-term impacts on the health of seagrass beds.

- What is the best porta potty / marine toilet? Composting? Full treatment? Affordable? For small boating.

*Response:* The IC will investigate these systems to determine the best systems for Tomales Bay.

- How do we educate visitors from outside the Tomales Bay community?

*Response:* The Working Group is developing a boater education and outreach plan

- Are there any data on the types of vessels and sizes?

*Response:* Pages 19-21 of the document provide the best available information. For example, an aerial survey from September 2003 is cited in the document. It found 449 vessels in Tomales Bay or on the immediate shoreline of the bay (including storage areas). The count included 146 powercraft, 165 sail vessels, 126 human powered vessels (kayak, canoe) and 12 unknown vessel types.

- Are there ways to enhance the growth of eelgrass?

*Response:* There have been restoration projects in eelgrass that have had limited success, but this is beyond the scope of the plan.

- What is the current number or percentage of boats in conflict with seagrass?

*Response:* Based on available data (Department of Fish and Game seagrass data and mooring locations provided in a 2006 mooring survey), the IC estimates that approximately 20% of moorings that existed in 2006 were located in seagrass beds. Seagrass boundaries fluctuate from year to year, and GIS-based maps have a significant margin of error. Therefore, this estimate should be viewed as a rough estimate.

- A 1979 mooring with a chain replaced several times- is this legal? How do you make the determinations regarding when a mooring was placed? Does the 1981 regulation include the anchoring vessels?

*Response:* If the mooring was not installed under a lease from CSLC then it is not a legal mooring regardless of when it was placed.